



**US Army Corps
of Engineers®**

Engineer Research and
Development Center

Environmental Laboratory

Description

The Environmental Laboratory (EL) supports the environmental mission of the Corps of Engineers, the Army, the Department of Defense and the nation through research, development, experimentation, special studies, and technical support. EL research includes a network of expertise and facilities from other US Army Engineer Research and Development Center (ERDC) laboratories, other government agencies, academia, and the private sector. A diverse, interdisciplinary staff of over 200 engineers, scientists, technicians and support personnel, covering a broad range of the physical, chemical and biological sciences provides the expertise and experience to conduct all phases of technology development (from basic research to field implementation). Over 81 percent of EL staff hold advanced degrees.

Capabilities

EL conducts research in resource inventory, analysis, evaluation, and management; environmental assessment and restoration; environmental engineering; environmental modeling and simulation; environmental chemistry; wetlands technology; water quality, dredging and dredge material management; endangered species, invasive species, outdoor recreation, and cultural resources. EL has a variety of specialized R&D facilities to support its mission, including

- Fate and Effects (environmental and toxicology laboratory and greenhouses, rainfall simulator/soil lysimeters, environmental chambers, static and continuous flow bioassays, toxicity, fate, transport, and risk modeling)
- Aquatic and Wetlands (laboratory and greenhouses, flumes, environmental chambers, molecular biology laboratory)
- Geospatial Data Analysis (GIS/Remote Sensing/GPS technology applications; data fusion, landscape modeling and data analysis; unique spatial applications)
- Environmental and Molecular Chemistry (specialized analytical chemistry support, quality assurance program development, the premier environmental chemistry laboratory in the DoD)
- Hazardous Waste Research (military and civilian cleanup support, RCRA permitted, recognized by EPA as a premier facility)

EL also has five field stations in Lewisville, TX; Spring Valley, WI; Omaha, NE; North Bonneville, WA; and Calhoun Falls, SC. In addition, its centers of expertise include: the Center for Water Quality and Aquatic Plant Research and Technology; Environmental Modeling, Simulation and Assessment Center; Center for Contaminated Sediments; Wetlands Research and Technology Center; Center for Cultural Site Preservation Technology; and Natural Resources R&D Center.

Point of Contact

Dr. Beth Fleming, Acting Director, Environmental Laboratory, US Army Engineer Research and Development Center, 601-634-3943,
Beth.Fleming@erdc.usace.army.mil.

